RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/658,632_

Source: _1FWO_

Date Processed by STIC: _2/2/04_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221
Effective 12/13/03: **TELEPHONE: 571-272-2510; FAX: 571-273-0221**

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office; Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

RAW SEQUENCE LISTING   DATE: 02/02/2004
PATENT APPLICATION: **US/10/658,632**   TIME: 09:49:14

Input Set : **D:\SBIO-0002 Sequence Listing (10-658,632).txt**
Output Set: **N:\CRF4\01292004\J658632.raw**

```
 4 <110> APPLICANT: Chenchik, Alex
 6 <120> TITLE OF INVENTION: Methods for Gene Function Analysis
 9 <130> FILE REFERENCE: SBIO/0002
11 <140> CURRENT APPLICATION NUMBER: 10/658,632
12 <141> CURRENT FILING DATE: 2003-09-08
14 <160> NUMBER OF SEQ ID NOS: 20
16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 43
20 <212> TYPE: DNA
21 <213> ORGANISM: human
23 <220> FEATURE:
24 <221> NAME/KEY: promoter
25 <222> LOCATION: (1)....(7)
27 <221> NAME/KEY: misc_RNA
28 <222> LOCATION: (8)...(43)
29 <223> OTHER INFORMATION: n=a,t,g,c
```

pp 1-5

Does Not Comply
Corrected Diskette Needed

) no t's allowed in an RNA sequence. Use "u," instead.

```
W--> 31 <400> 1
W--> 32 ggacgagnnn nnnnnnnnnn nnnnnnnnnn aattcatcta tgt        43
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 43
36 <212> TYPE: DNA
37 <213> ORGANISM: human
39 <220> FEATURE:
40 <221> NAME/KEY: misc_RNA       same error
41 <222> LOCATION: (7)...(43)
42 <223> OTHER INFORMATION: n=a,t,g,c
44 <400> SEQUENCE: 2
W--> 45 cctgctccta gnnnnnnnnn nnnnnnnnnn nnnngtagat aca        43
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 59
49 <212> TYPE: DNA
50 <213> ORGANISM: human
52 <220> FEATURE:
53 <221> NAME/KEY: misc_RNA     same
54 <222> LOCATION: (7)...(53)
56 <400> SEQUENCE: 3
57 gatccgatg atctggatcc accaattcaa gagattggtg gatccagatc atcttttg   59
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 59
61 <212> TYPE: DNA
62 <213> ORGANISM: human
64 <220> FEATURE:
```

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```
 65 <221> NAME/KEY: misc_RNA      same
 66 <222> LOCATION: (3)...(59)
 68 <400> SEQUENCE: 4
 69 gcctactaga cctaggtggt taagttctct aaccacctag gtctagtaga aaaacttaa  59
 71 <210> SEQ ID NO: 5
 72 <211> LENGTH: 75
 73 <212> TYPE: DNA
 74 <213> ORGANISM: human
 76 <220> FEATURE:
 77 <221> NAME/KEY: misc_RNA           same
 78 <222> LOCATION: (7)...(69)
 80 <400> SEQUENCE: 5
 81 gatccgggtg atctggatct accaaggctt gttttcaaga gaaacaagtc ttggtggatc  60
 82 cagatcatct ttttg                                                   75
 84 <210> SEQ ID NO: 6
 85 <211> LENGTH: 69
 86 <212> TYPE: DNA
 87 <213> ORGANISM: human
 89 <220> FEATURE:
 90 <221> NAME/KEY: misc_RNA      same
 91 <222> LOCATION: (3)...(59)
 93 <400> SEQUENCE: 6
 94 gcccactaga cctagatggt tcgaaagttc tctttgttca gaaccactag gtctagtaga  60
 95 aaaacttaa                                                          69
 97 <210> SEQ ID NO: 7
 98 <211> LENGTH: 30
 99 <212> TYPE: DNA
100 <213> ORGANISM: human
102 <220> FEATURE:
103 <221> NAME/KEY: unsure
104 <222> LOCATION: (8)...(21)
105 <223> OTHER INFORMATION: n=a,t,g,c
107 <400> SEQUENCE: 7
108 tgggaaaann nnnnnnnnnn nttttttagag                                   30
110 <210> SEQ ID NO: 8
111 <211> LENGTH: 30
112 <212> TYPE: DNA
113 <213> ORGANISM: human
115 <220> FEATURE:
116 <221> NAME/KEY: unsure
117 <222> LOCATION: (13)...(25)
118 <223> OTHER INFORMATION: n=a,t,g,c
120 <400> SEQUENCE: 8
121 accctttttt tcnnnnnnnnn nnnnnatctc                                   30
123 <210> SEQ ID NO: 9
124 <211> LENGTH: 31
125 <212> TYPE: DNA
126 <213> ORGANISM: human
128 <220> FEATURE:
```

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```
129 <221> NAME/KEY: misc_RNA          same error as shown on previous pages
130 <222> LOCATION: (6)...(31)
131 <223> OTHER INFORMATION: Viral vector sequence
133 <400> SEQUENCE: 9
134 aaagcatgat ctggatccac caagacttgt t.                            31
136 <210> SEQ ID NO: 10
137 <211> LENGTH: 31
138 <212> TYPE: DNA
139 <213> ORGANISM: human
141 <220> FEATURE:
142 <221> NAME/KEY: misc_RNA          same
143 <222> LOCATION: (2)...(27)
144 <223> OTHER INFORMATION: Viral vector sequence
146 <400> SEQUENCE: 10
147 ctactagacc taggtggttc tgaacaaaa a                              31
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 59
151 <212> TYPE: DNA
152 <213> ORGANISM: human
154 <220> FEATURE:
155 <221> NAME/KEY: misc_RNA
156 <222> LOCATION: (17)...(42)              u
157 <223> OTHER INFORMATION: n=a,t,g,c
159 <400> SEQUENCE: 11
W--> 160 agcagaagac taaaagnnnn nnnnnnnnnn nnnnnnnnnn nntttatgt cttctacga   59
162 <210> SEQ ID NO: 12
163 <211> LENGTH: 19
164 <212> TYPE: DNA
165 <213> ORGANISM: human
167 <220> FEATURE:
168 <221> NAME/KEY: primer_bind
169 <222> LOCATION: (11)...(19)
170 <223> OTHER INFORMATION: Viral vector sequence
172 <400> SEQUENCE: 12
173 acgcaggtgt agcagaaga                                          19
175 <210> SEQ ID NO: 13
176 <211> LENGTH: 59
177 <212> TYPE: DNA
178 <213> ORGANISM: human
180 <220> FEATURE:
181 <221> NAME/KEY: misc_RNA
182 <222> LOCATION: (17)...(42)              u
183 <223> OTHER INFORMATION: n=a,t,g,c
185 <400> SEQUENCE: 13
W--> 186 agcagaagac taaaagnnnn nnnnnnnnnn nnnnnnnnnn nntttatgt cttctacga   59
188 <210> SEQ ID NO: 14
189 <211> LENGTH: 20
190 <212> TYPE: DNA
191 <213> ORGANISM: human
```

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```
     193 <220> FEATURE:
     194 <221> NAME/KEY: primer_bind
     195 <222> LOCATION: (1)...(11)
     196 <223> OTHER INFORMATION: Viral vector sequence
     198 <400> SEQUENCE: 14
     199 cagaagatgc tcacgacgct                                          20
     201 <210> SEQ ID NO: 15
     202 <211> LENGTH: 78
     203 <212> TYPE: DNA
     204 <213> ORGANISM: human
     206 <220> FEATURE:
     207 <221> NAME/KEY: misc_RNA
     208 <222> LOCATION: (27)...(52)
     209 <223> OTHER INFORMATION: n=a,t,g,c
     211 <400> SEQUENCE: 15
W--> 212 acgcaggtgt agcagaagac taaaagnnnn nnnnnnnnnn nnnnnnnnnn nntttttatgt 60
     213 cttctacgag tgctgcga                                           78
     215 <210> SEQ ID NO: 16
     216 <211> LENGTH: 78
     217 <212> TYPE: DNA
     218 <213> ORGANISM: human
     220 <220> FEATURE:
     221 <221> NAME/KEY: misc_RNA
     222 <222> LOCATION: (27)...(52)
     223 <223> OTHER INFORMATION: n=a,t,g,c
     225 <400> SEQUENCE: 16
W--> 226 tgcgtccaca tcgtcttctg attttcnnnn nnnnnnnnnn nnnnnnnnnn nnaaaataca 60
     227 gaagatgctc acgacgct                                           78
     229 <210> SEQ ID NO: 17
     230 <211> LENGTH: 30
     231 <212> TYPE: DNA
     232 <213> ORGANISM: human
     234 <220> FEATURE:
     235 <221> NAME/KEY: misc_RNA
     236 <222> LOCATION: (5)...(30)
     237 <223> OTHER INFORMATION: n=a,t,g,c
     239 <400> SEQUENCE: 17
W--> 240 aaagnnnnnn nnnnnnnnnn nnnnnnnnnn                              30
     242 <210> SEQ ID NO: 18
     243 <211> LENGTH: 30
     244 <212> TYPE: DNA
     245 <213> ORGANISM: human
     247 <220> FEATURE:
     248 <221> NAME/KEY: misc_RNA
     249 <222> LOCATION: (1)...(26)
     250 <223> OTHER INFORMATION: n=a,t,g,c
     252 <400> SEQUENCE: 18
W--> 253 nnnnnnnnnn nnnnnnnnnn nnnnnnaaaa                              30
     255 <210> SEQ ID NO: 19
```

RAW SEQUENCE LISTING   DATE: 02/02/2004
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Input Set : **D:\SBIO-0002 Sequence Listing (10-658,632).txt**
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```
256 <211> LENGTH: 44
257 <212> TYPE: DNA
258 <213> ORGANISM: human
260 <220> FEATURE:
261 <221> NAME/KEY: mRNA
262 <222> LOCATION: (9)...(35)                    μ
263 <223> OTHER INFORMATION: n=a,t,g,c
265 <400> SEQUENCE: 19
W--> 266 tgggaaaagn nnnnnnnnnn nnnnnnnnnn nnnnnttttt agag          44
268 <210> SEQ ID NO: 20
269 <211> LENGTH: 44
270 <212> TYPE: DNA
271 <213> ORGANISM: human
273 <220> FEATURE:
274 <221> NAME/KEY: misc_RNA
275 <222> LOCATION: (9)...(35)                    μ
276 <223> OTHER INFORMATION: n=a,t,g,c
278 <400> SEQUENCE: 20
W--> 279 acccttttcn nnnnnnnnnn nnnnnnnnnn nnnnnaaaaa tctc          44
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/02/2004
PATENT APPLICATION: US/10/658,632   TIME: 09:49:15

Input Set : D:\SBIO-0002 Sequence Listing (10-658,632).txt
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28
Seq#:1; N Pos. 29,30
Seq#:2; N Pos. 12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31
Seq#:2; N Pos. 32,33,34
Seq#:7; N Pos. 9,10,11,12,13,14,15,16,17,18,19,20,21
Seq#:8; N Pos. 13,14,15,16,17,18,19,20,21,22,23,24,25
Seq#:11; N Pos. 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36
Seq#:11; N Pos. 37,38,39,40,41,42
Seq#:13; N Pos. 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36
Seq#:13; N Pos. 37,38,39,40,41,42
Seq#:15; N Pos. 27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46
Seq#:15; N Pos. 47,48,49,50,51,52
Seq#:16; N Pos. 27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46
Seq#:16; N Pos. 47,48,49,50,51,52
Seq#:17; N Pos. 5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25
Seq#:17; N Pos. 26,27,28,29,30
Seq#:18; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:18; N Pos. 24,25,26
Seq#:19; N Pos. 10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29
Seq#:19; N Pos. 30,31,32,33,34,35
Seq#:20; N Pos. 10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29
Seq#:20; N Pos. 30,31,32,33,34,35